



**Capt Ed "Clyde" Langford**  
**Director Aviation Safety**  
**Naval Safety Center**



# ***Agenda***

- **Goals**
- **Aviation Mishaps Overview**
- **PMV / Off-Duty Mishaps**
- **Fatigue**
- **Risk Management**
- **Tools for Success**
- **Q & A**

**What's wrong with this  
picture?**









**Here's your science fact for the week:**  
**Newton's first law**  
**... a moving object will keep moving at the same speed**  
**and in the same direction unless acted on by some force.**

**8:56**

**Bucketman Returns!**



20 Apr 07



*Temporary Insanity II*



# Fatal motorcycle accident



**April 2007, 1:00  
am**

**In excess of 100  
mph**



**The Safest Forehead**



# Naval Safety Center



Providing aviation, afloat, and shore support  
to Navy and Marine Corps commands



**NSC at your service... for free!**

Let our experience, expertise and unrivaled  
commitment to safety work for you.

**Mishap Investigations**

**Surveys**

**Assist Visits**

**Data Analysis**

**Workshops**

**Publications**

**Website**

**Presentations**

**Exhibits**

Call 757-444-3520 (DSN 564) or visit our website: [www.safetycenter.navy.mil](http://www.safetycenter.navy.mil)

*Naval Safety Center*  
**provides safety assistance and advice** to the CNO, CMC, and the Deputy Assistant SECNAV for Safety **in order to:**

- ✓ **enhance the warfighting capability** of the Navy and Marine Corps,
- ✓ **preserve resources** and
- ✓ **improve combat readiness** by preventing mishaps

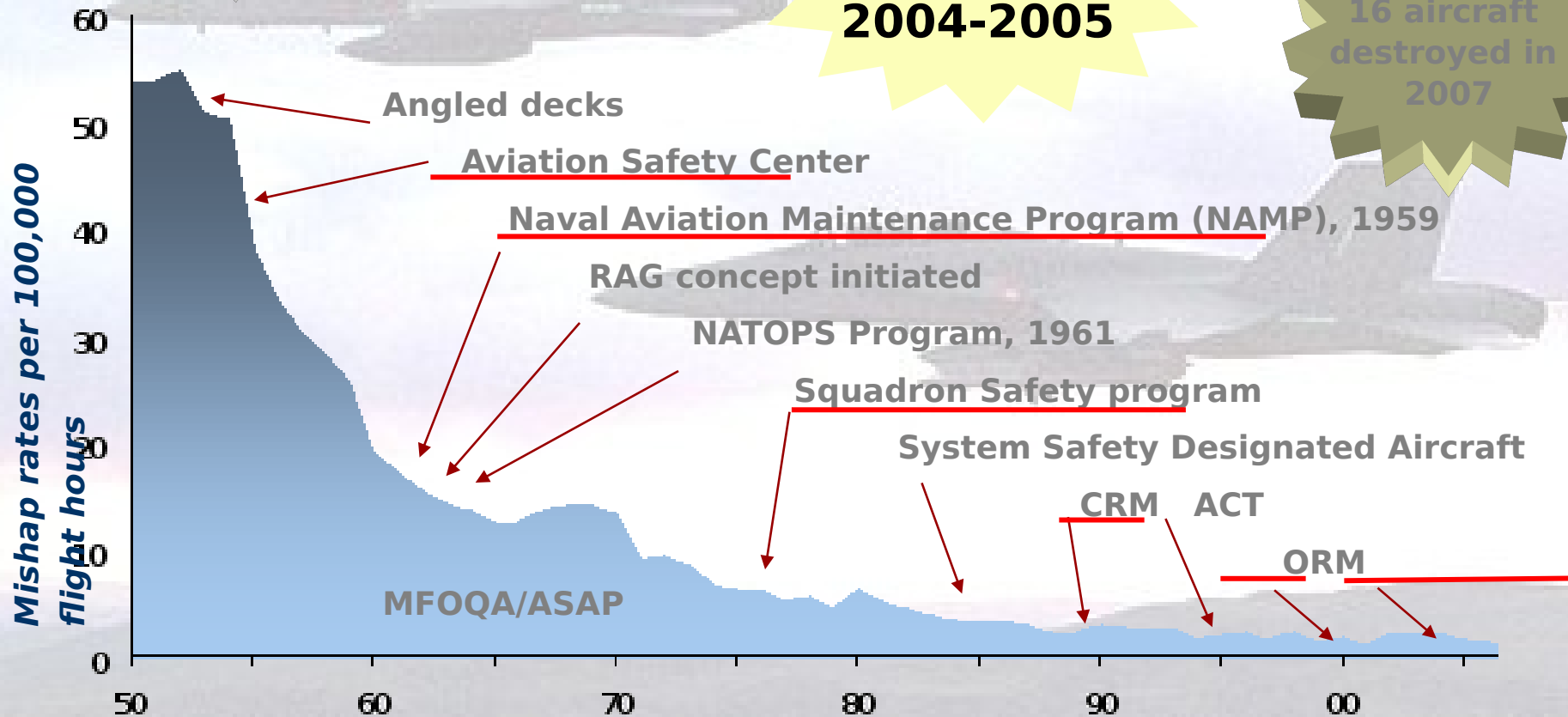


# Aviation Safety Historical Perspective

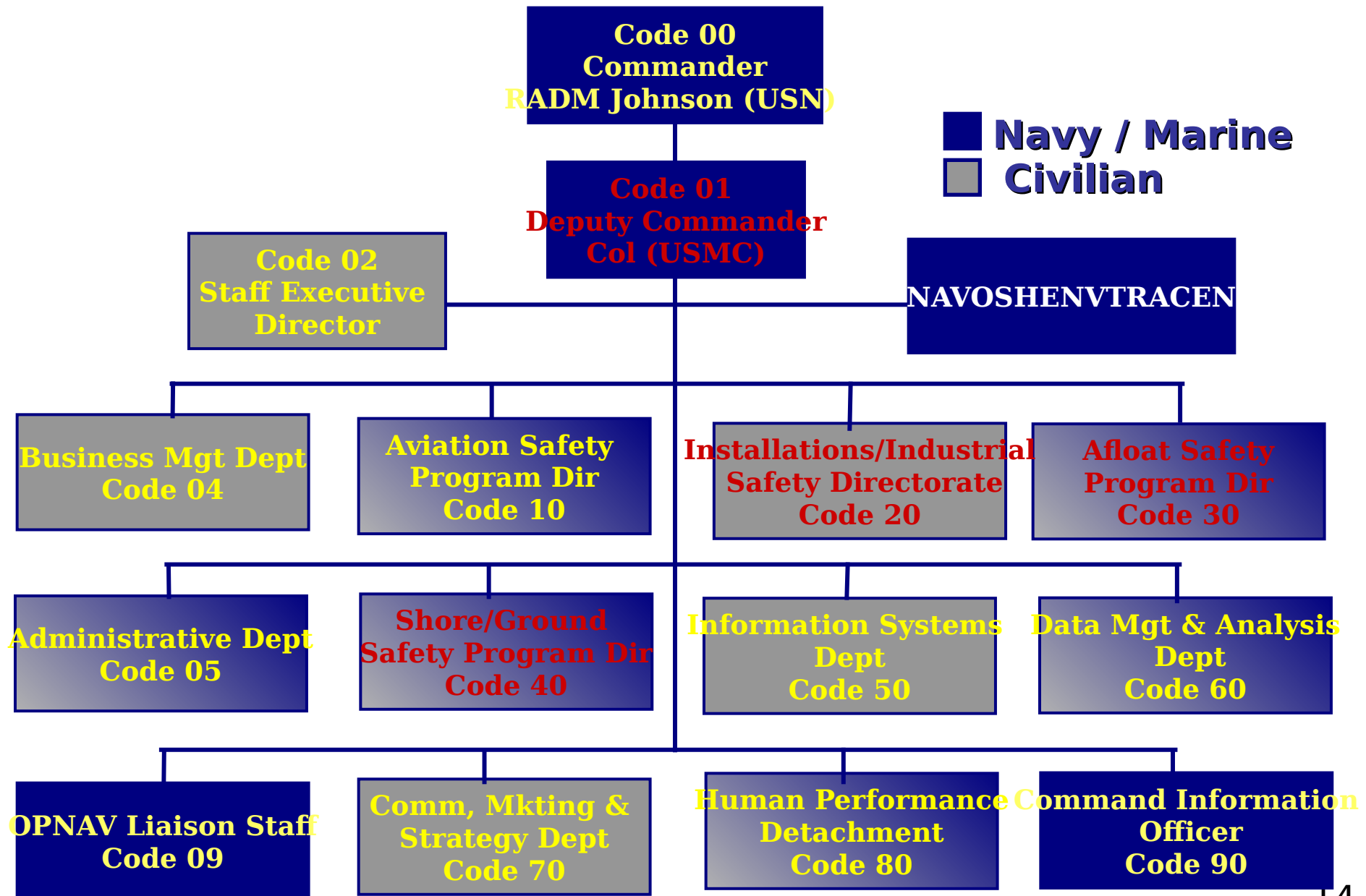
776 aircraft destroyed in 1954

45 aircraft destroyed and 59 fatalities in 2004-2005

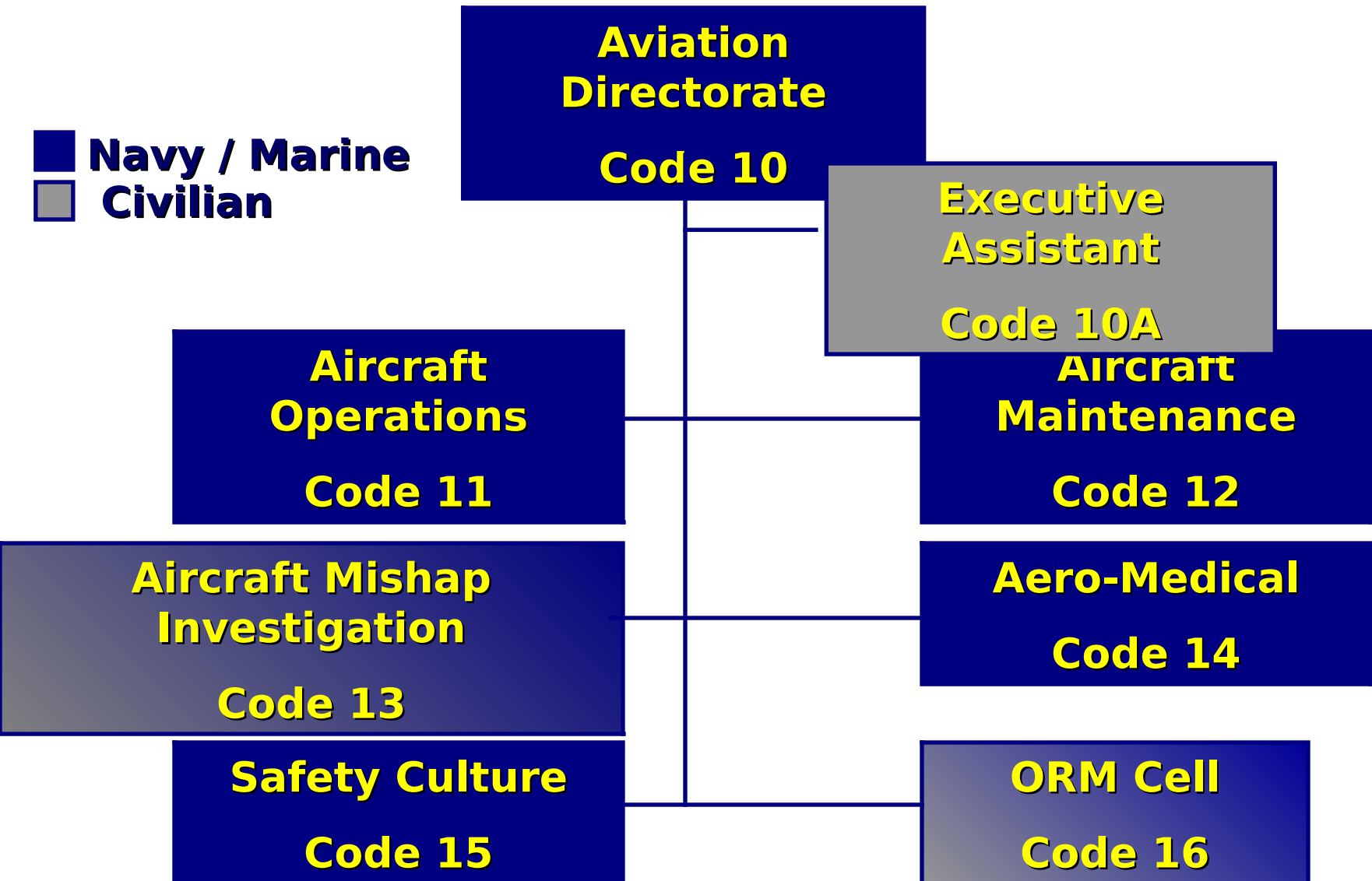
16 aircraft destroyed in 2007



# Commander, Naval Safety Center



# ***Aviation Directorate Organization***





# Cultural Mindsets



# ***Magnitude of Accidents***

## ***In FY07, Navy and Marine Corps Operational Mishaps Resulted In:***

### **NAVY**

- **1 Navy death every 77 hours (3.2 days)**
- **1 POV death every 112 hours (4.7days)**
- **1 Aviation death every 36 days**
- **1 aircraft destroyed every 45 days**
- **\$940K a day in aviation losses**

### **MARINE CORPS**

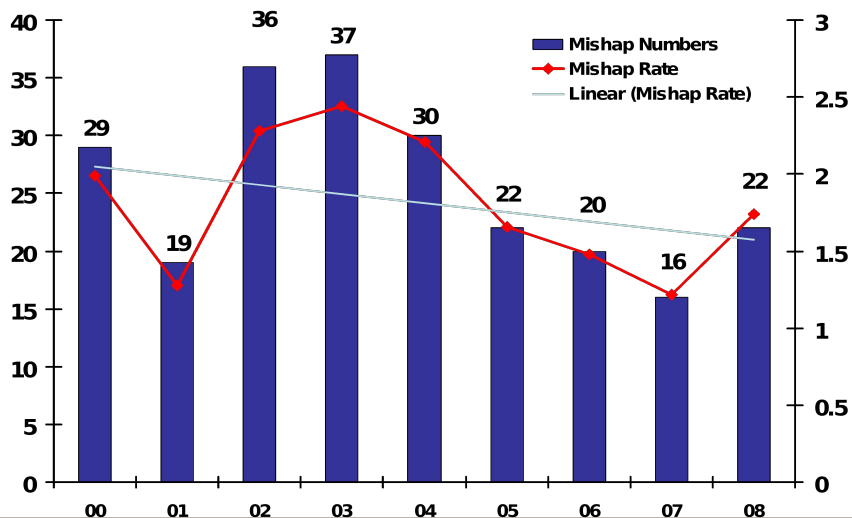
- **1 Marine death every 69 hours (2.9 days)**
- **1 POV death every 132 hours (5.5 days)**
- **1 Aviation death every 33 days**
- **1 Aircraft destroyed every 45 days**
- **\$463K a day in aviation losses**



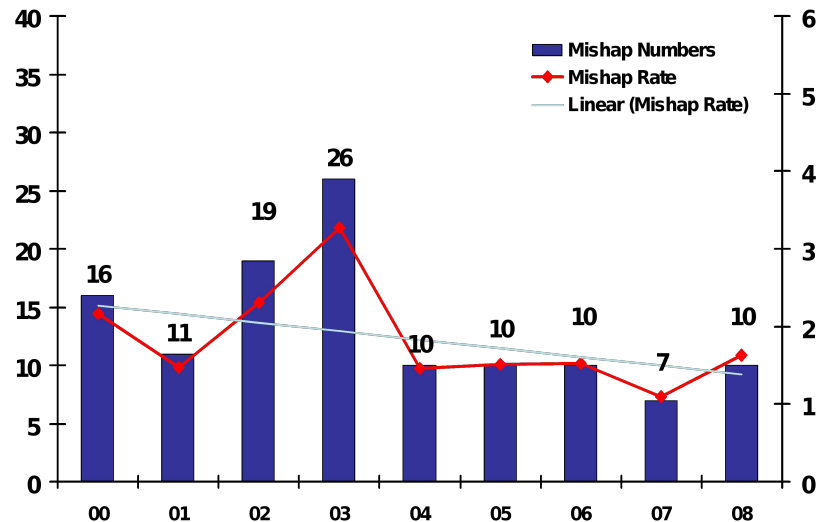
# CLASS A FLIGHT MISHAP RATES (FY00-08)



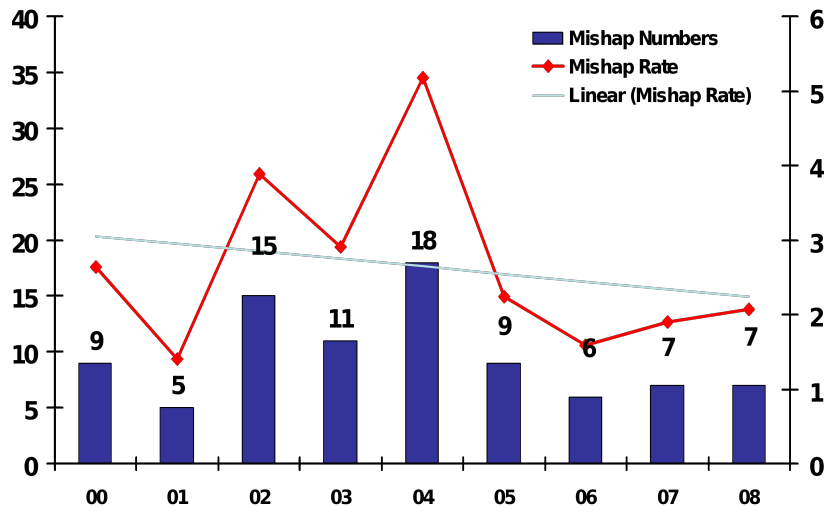
## Class A Flight Mishap Rate



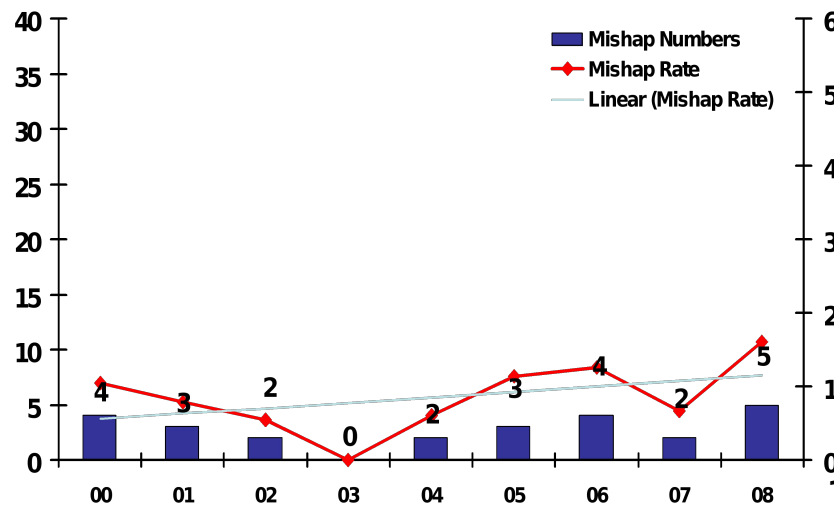
## USN Class A FM Rate (All Platforms)



## USMC Class A FM Rate (All Platforms)



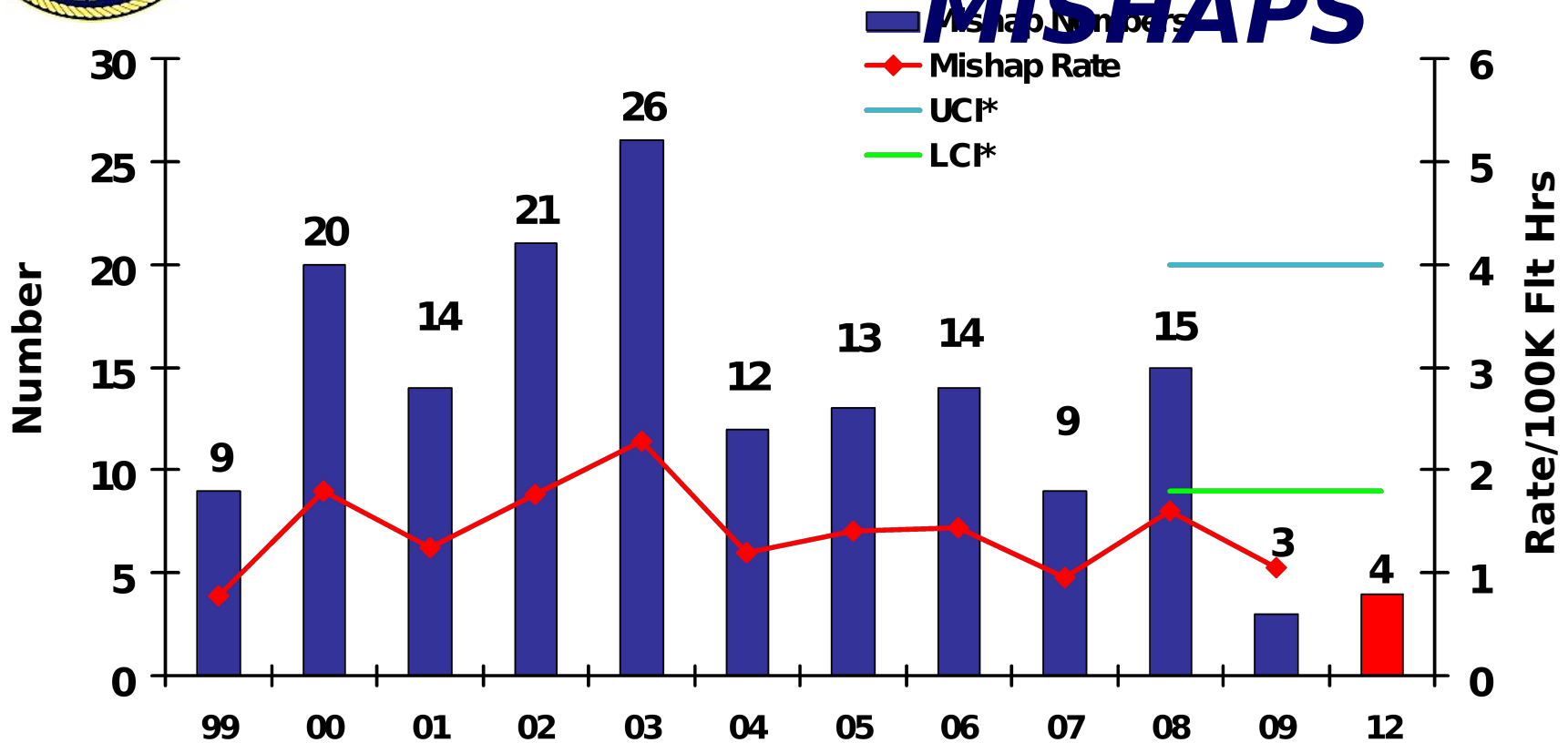
## Training Class A FM Rate







# CLASS A FLIGHT MISHAPS



Max  
23 Jan 09

23 Jan 08

**CLASS A MISHAPS/MISHAP RATE FY COMPARISON:**

**3 / 1.05**

**7 / 2.52**

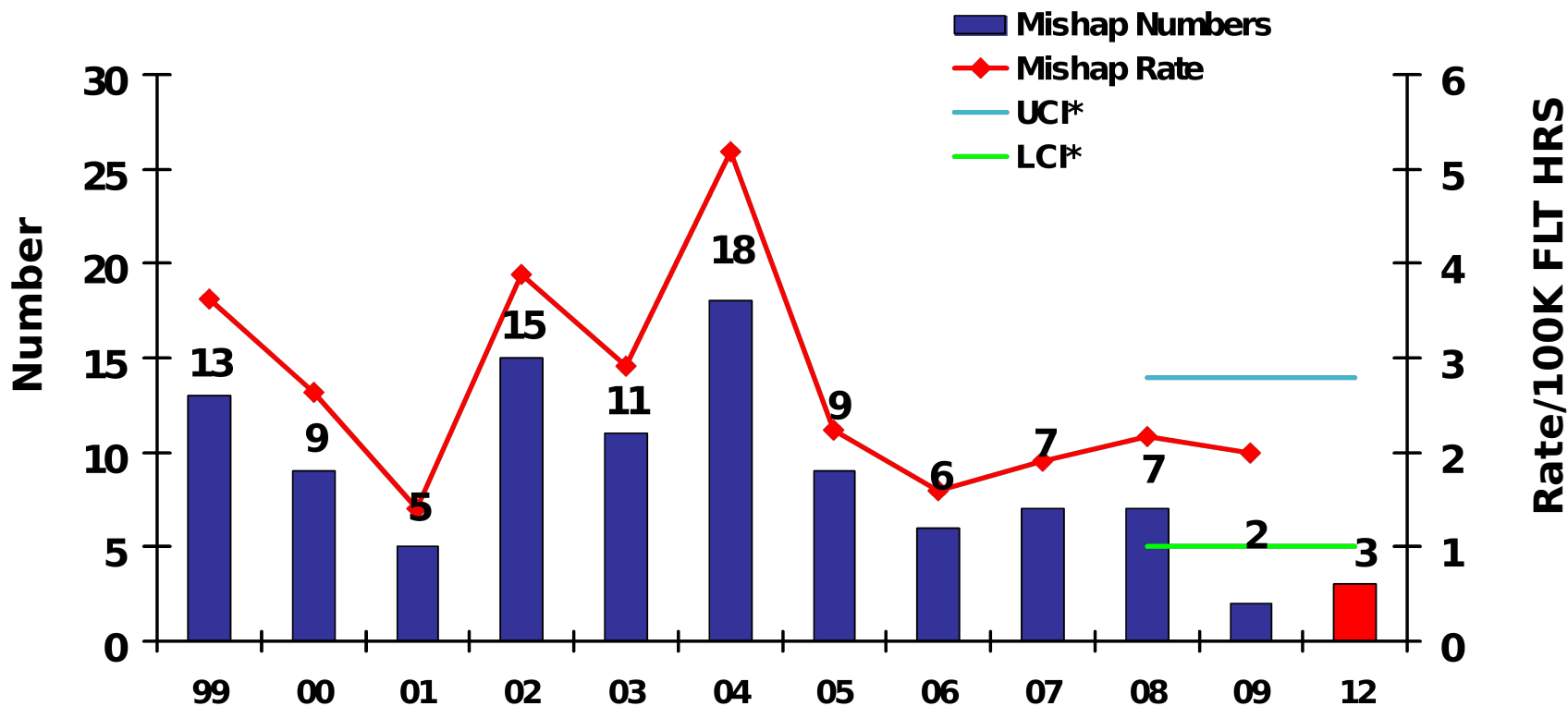
**FY08 MISHAPS/MISHAP RATE: 15 / 1.60**

**10-YEAR AVERAGE (FY99-08) MISHAPS/MISHAP RATE: 15.3 / 1.45**

\*see last slide for definition of UCI/LCI



# CLASS A FLIGHT MISHAPS



Jan 08

2 / 2.01

CLASS A FM/FM RATE FY COMPARISON: 2 / 1.99

FY08 MISHAPS/MISHAP RATE: 7 / 2.16

10-YEAR AVERAGE (FY99-08) MISHAPS/MISHAP RATE: 10 / 2.75

23 Jan 09

23

Max

\*see last slide for definition of UCI/LCI

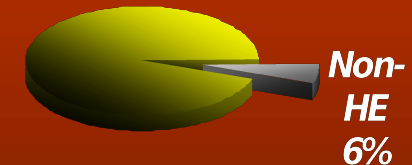
# ***“Causal Factor: Human Error”***

USN/USMC, FY03-07

## ***No. of Class A Mishaps***

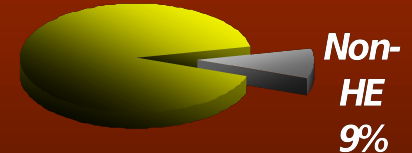
***USN Aviation*** = 81 of 86

→ HE 94%



***USMC Aviation*** = 52 of 57

→ HE 91%



### **Leading Causal Factors**

- **Human Error (90%)**
  - **Aircrew** (breakdown in Crew Resource Management, poor decision making, failure to properly perform emergency procedures)
  - **Supervisory** (failure to provide adequate guidance and training)
- **Material/Systems Malfunction (10%)**
  - **Material/component catastrophic failure** (no human error involved)

# ***“Causal Factor: Human Error”***

## **TRENDS**

### **Mishap Investigations**

- Human error (aircrew):  
Leading causal factors
  - Skill-based errors
  - Decision errorsLeading preconditions for errors
  - CRM failures
  - Adverse mental states
- Inexperience
- Training issues

## **TAKEAWAYS**

- Adherence to basic rules, regulations and NATOPS procedures
- Proper pre- flight planning
- Training
- Proficiency
- Institutionalize ORM & CRM
- Enforce standards
- Increase checks and balances







# RED VS. BLUE THREAT (FY91-Present)

- **RED THREAT: Combat Losses**

- **18 Aircraft:**
  - Marine Corps -13
  - Navy - 5

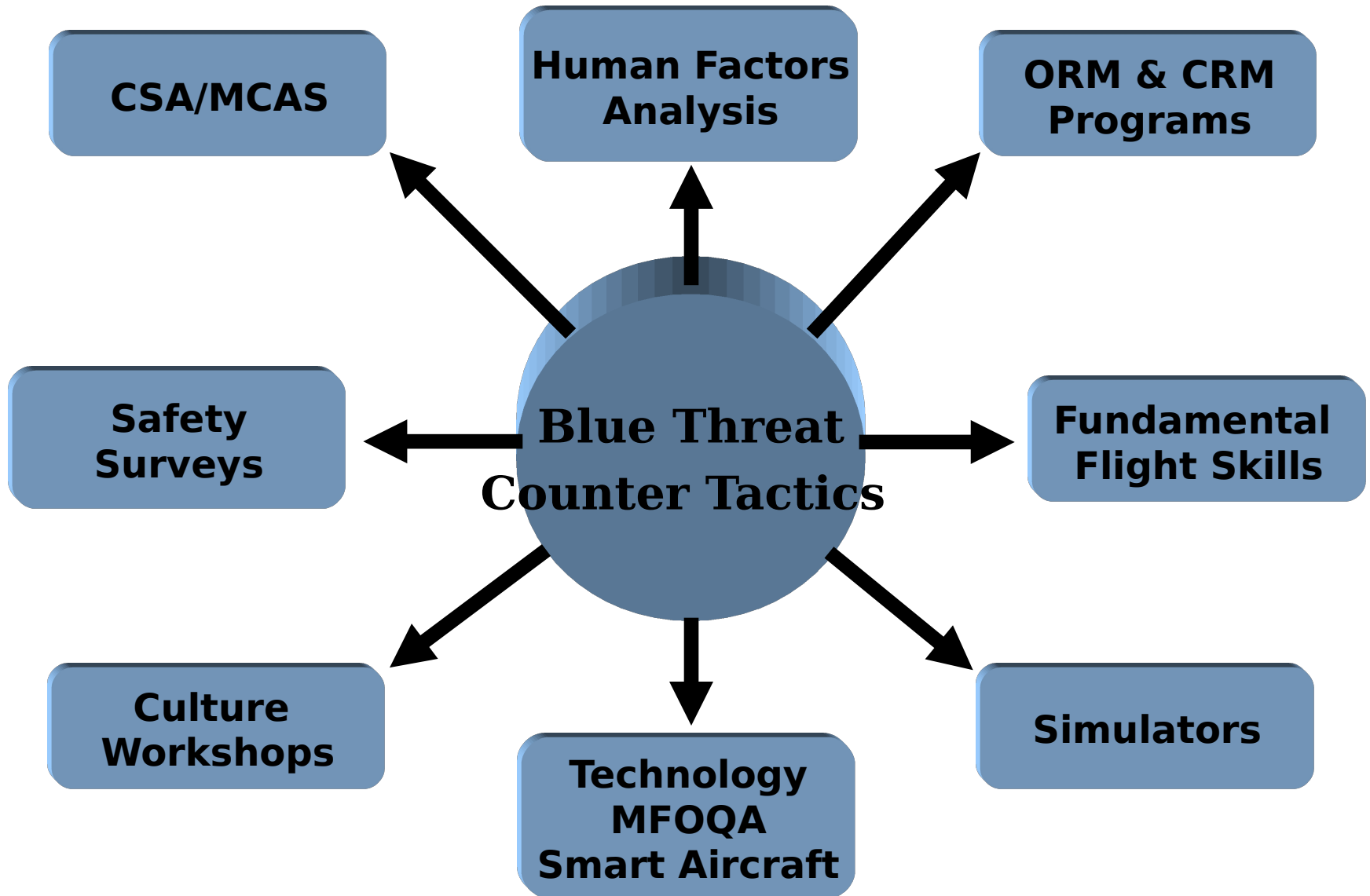
**VS.**

- **BLUE THREAT:**  
**547 Aircraft**

As of 26 Sep 08



# ***Blue Threat Mitigation Strategies***



**What is the top killer of our sailors?**



# How Did Our Sailors and Marines Die?

	217 Died in FY05	241 Died in FY06	182 Died in FY07
<b>PMV</b>	105	144	111
<b>Off-Duty Recreation</b>	(48%)	(60%)	(61%)
<b>Aviation</b>	32	26	25
<b>Shore / Ground / MV</b>	(15%)	(11%)	(14%)
<b>Operational / PT</b>	40	21 (9%)	21
<b>Surface</b>	(18%)	50	(12%)
<b>Ships/Sub/Diving</b>	39	(21%)	23
	(18%)		(13%)
	0	0	0
	NSC Data: 30 Sep	NSC Data: 30 Sep	NSC Data: 30 Sep



**Night Time,  
Weekend Alcohol,  
Speed mix for  
Disaster**



**Service member and cousin were killed when the Acura they were traveling in hit the semi-trailer truck. The Acura, which investigators said was going more than 80 mph, crumpled on impact.**



# Factors In Traffic Deaths

(USN/USMC, FY02-06)

Fatigue is considered a major factor in traffic deaths, but is under-reported throughout the fleet.

**FY02-06 Deaths: 627 (USN - 350) / (USMC - 277)**

**FY02: 140 (USN - 75) / (USMC - 65)**

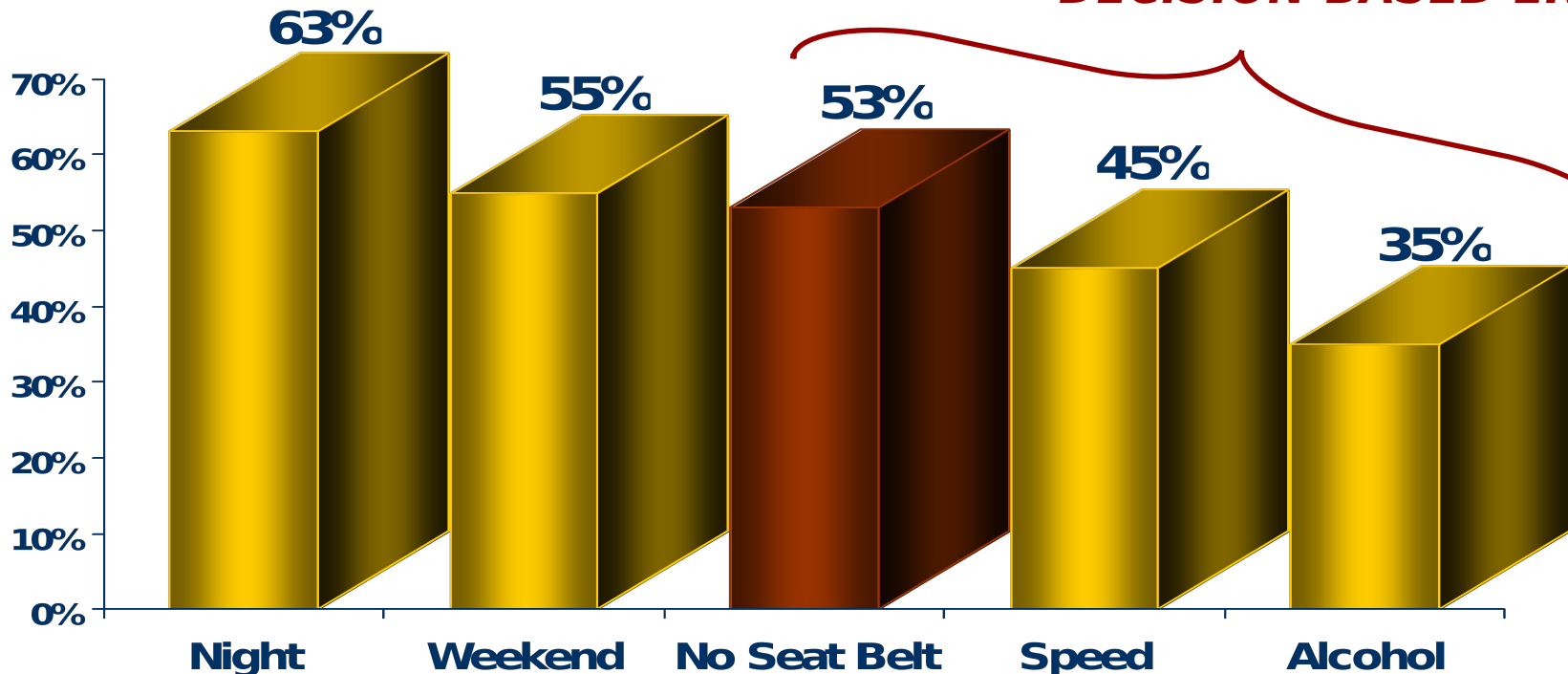
**FY03: 119 (USN - 66) / (USMC - 53)**

**FY04: 119 (USN - 73) / (USMC - 46)**

**FY05: 105 (USN - 58) / (USMC - 47)**

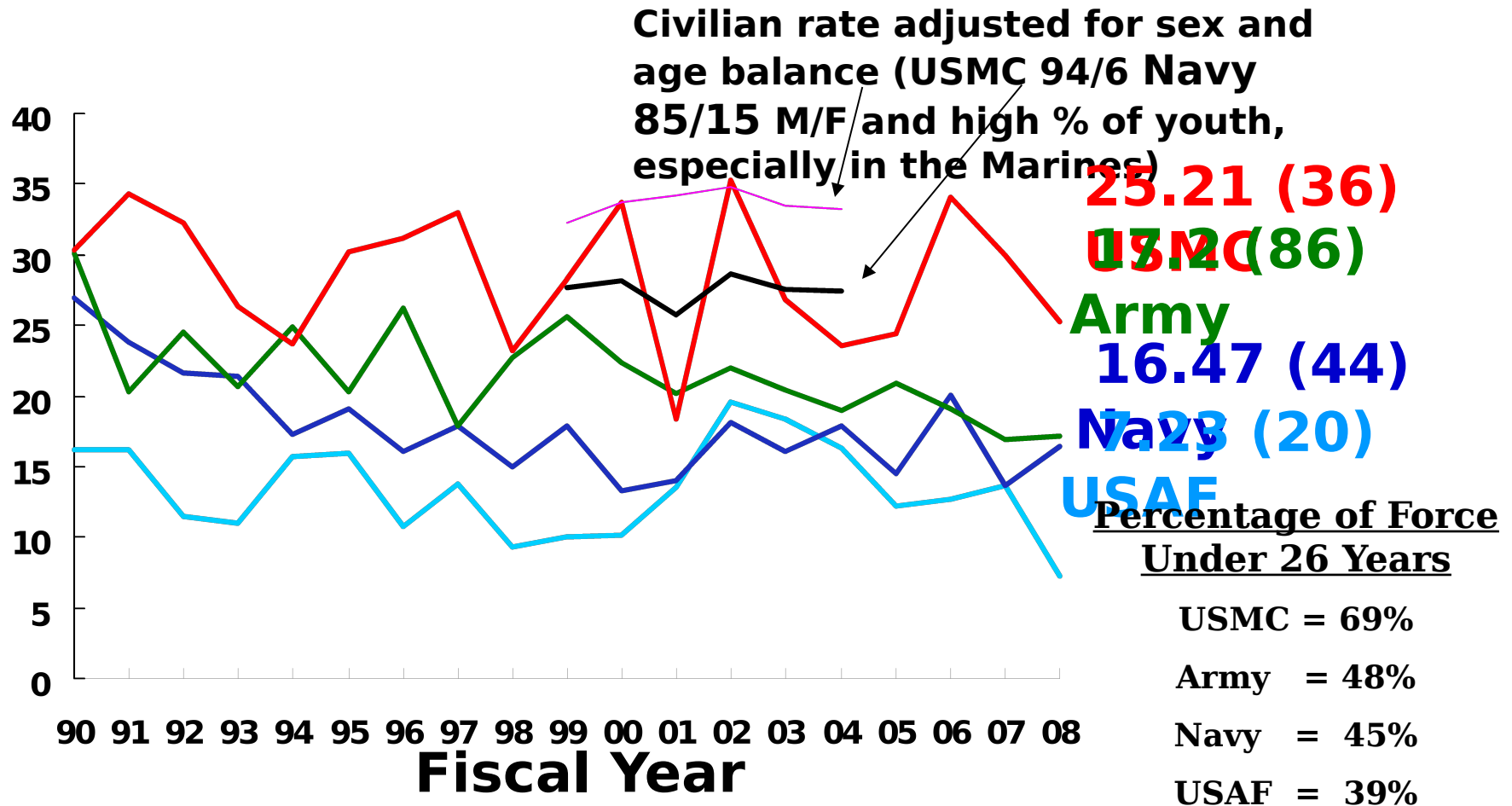
**FY06: 144 (USN - 78) / (USMC - 66)**

## DECISION-BASED ERRORS



# Armed Forces Traffic Death Rates

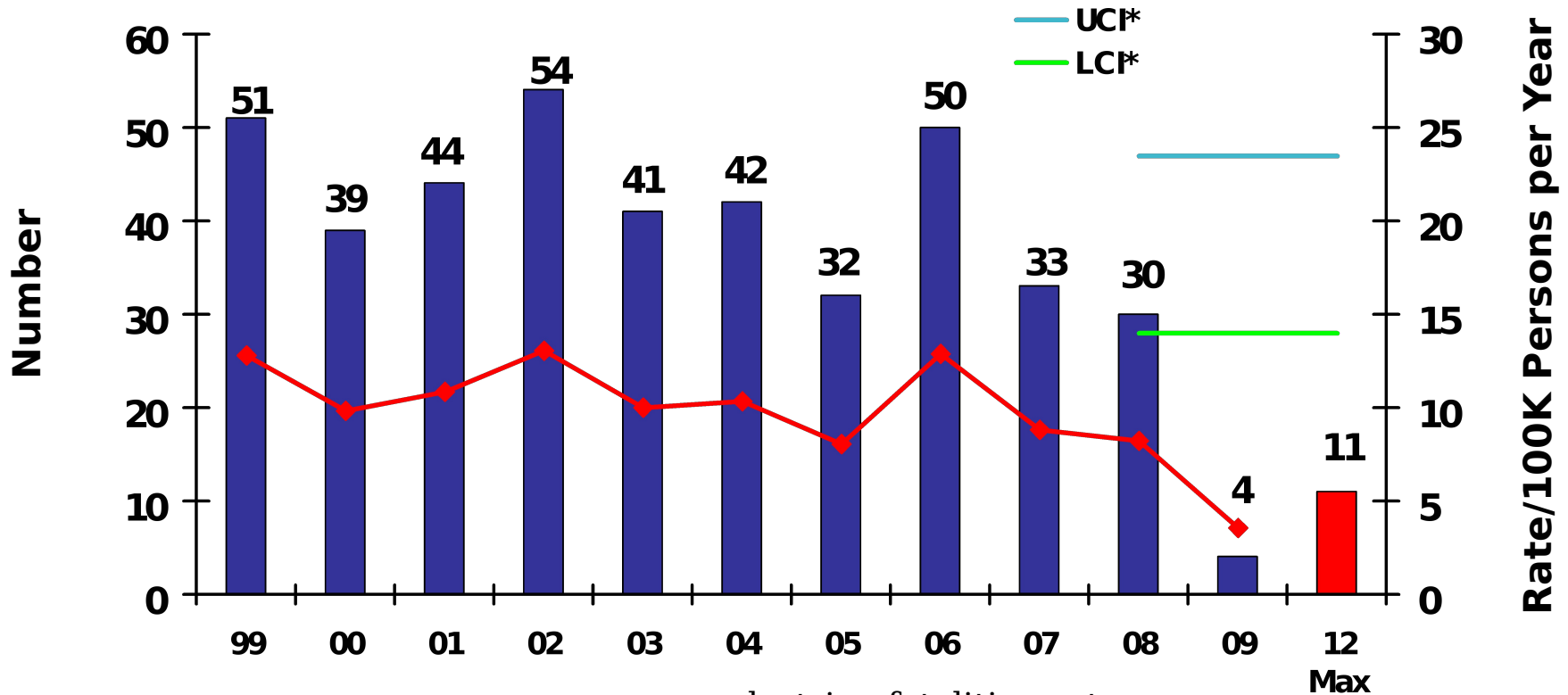
(FY90-08)



Rates per 100,000 active duty military personnel per year.



# 4-WHEEL PMV FATALITIES



pedestrian fatalities not included

Jan 08

**CLASS A FATALITIES/FATALITY RATE FY COMPARISON:** 4 / 3.52  
11 / 9.68

**FY08 FATALITIES/FATALITY RATE:** 30 / 8.24

**10 YEAR AVERAGE (FY99-08) FATALITIES/FATALITY RATE:** 41.6 / 10.51

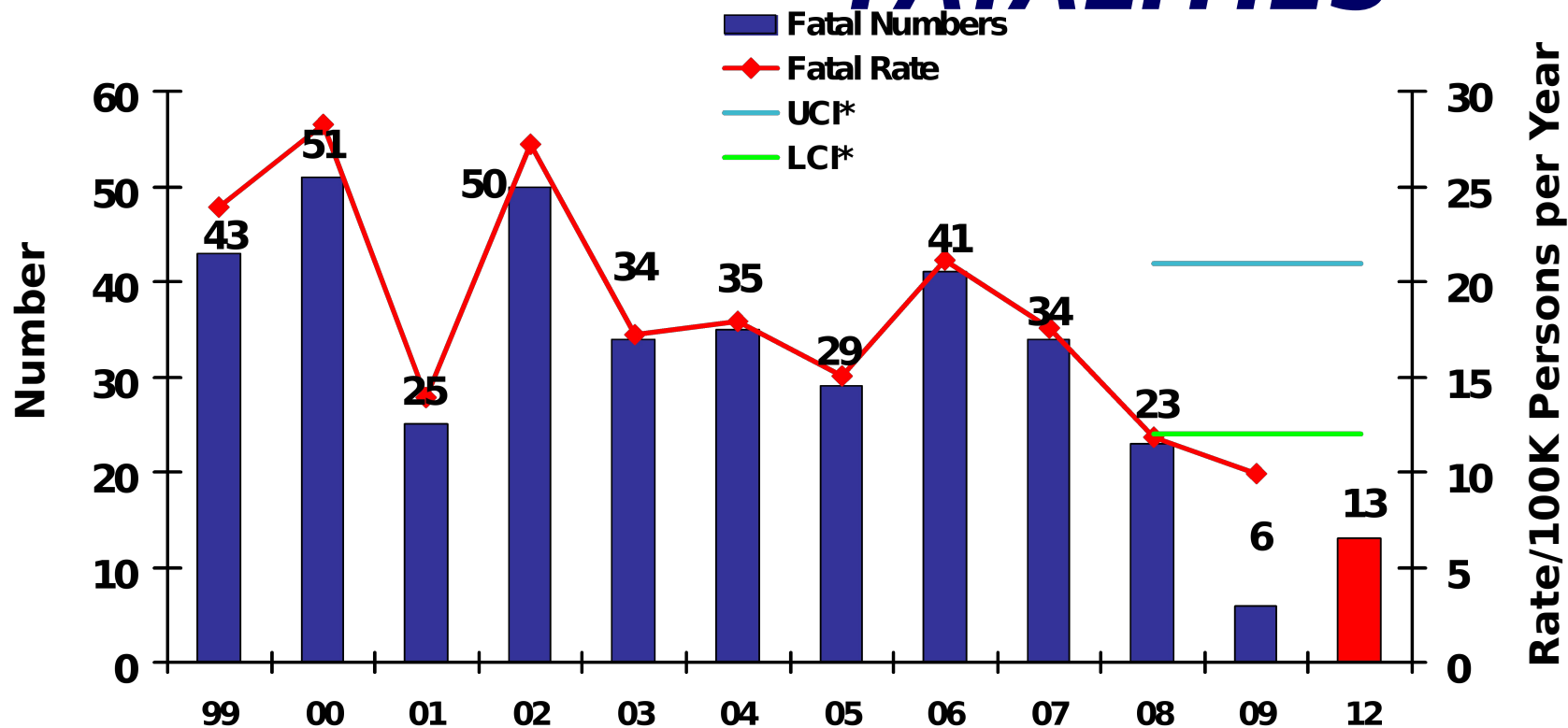
23 Jan 09

23

\*see last slide for definition of UCI/LCI



# 4-WHEEL PMV FATALITIES



pedestrian fatalities not included

Max

23 Jan 09

23

Jan 08

**CLASS A FATALITIES/FATALITY RATE FY COMPARISON:** 6 / 9.88 8 / 13.18  
FY08

**FATALITIES/FATALITY RATE:** 23 / 11.81

**10 YEAR AVERAGE (FY99-08) FATALITIES/FATALITY RATE:** 36.5 / 19.29

\*see last slide for definition of UCI/LCI



# ***Fleet Best Practices - PMV***

1. Understand who your risk takers are and help them manage risk; engaged mentorship
2. Recognize that becoming a safe driver is part of a young person's maturing process and is not complete until age 25
3. Use the Traffic Safety Toolbox on the Safety Center Website to help reduce mishaps
4. Engage in partnerships with local community. (Click It or Ticket, *You Drink, You Drive, You Lose*, MADD)
5. Solicit family members to help keep loved ones safe with letters home

# How about the motorcyclist?



# Hold On



# Motorcycle Types



Sport Touring 1100-1800cc  
450-650lb, High  
performance



Super Sport 650-1100cc  
290-350lb, High  
performance



Sport Unclad 650-1100cc  
290-350lb, High  
performance



Dirt Bike 50-650cc  
High ground clearance, not  
road ready



Standard 650-1800cc,  
700-1200lb, High power



Intro Bike 125-500cc,  
200-500lb



Scooters 50-650cc





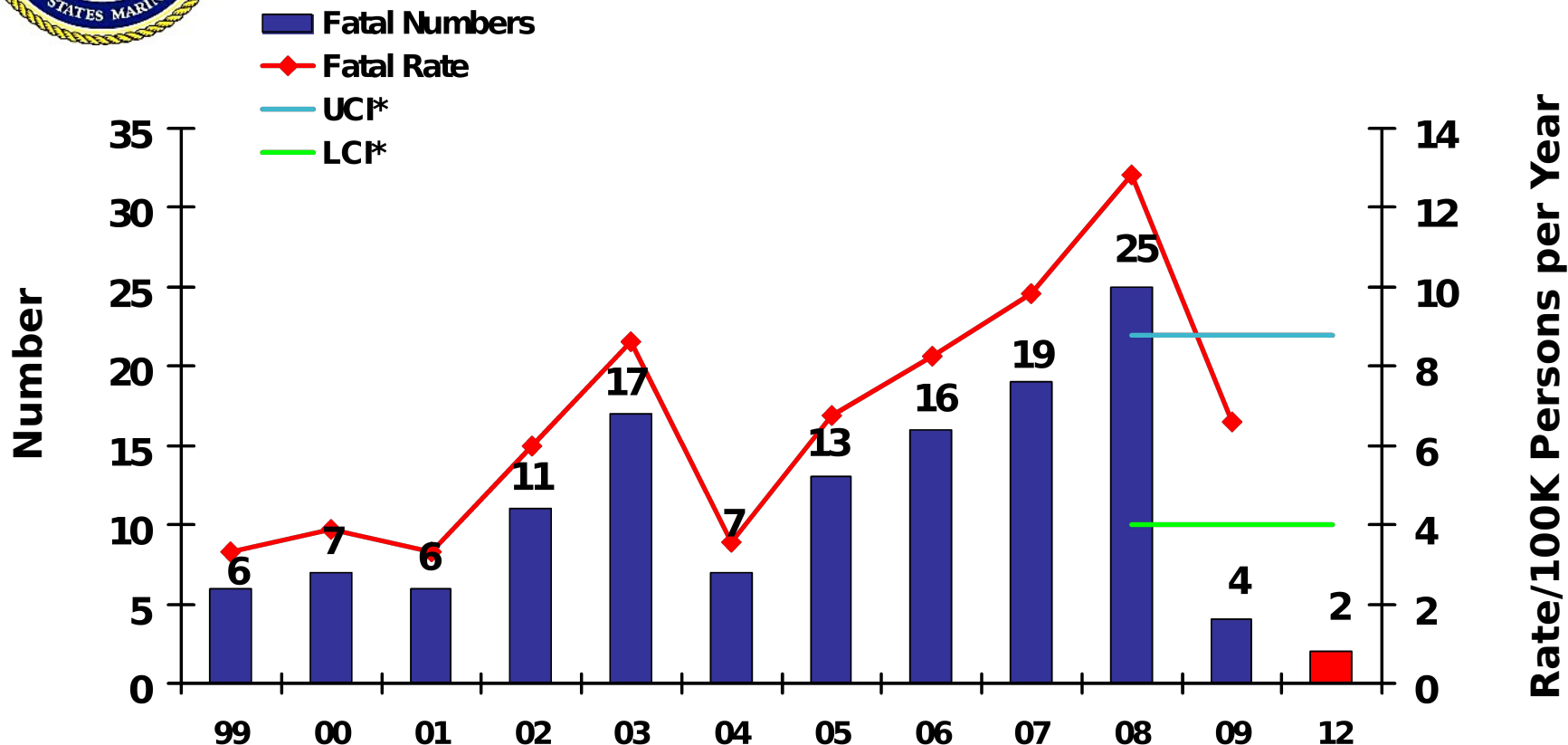
**CLASS A FATALITIES/FATALITY RATE FY COMPARISON:** **3 / 2.64** **6 /**  
**28** **FY08**

**10-YEAR AVERAGE (FY99-08) FATALITIES/FATALITY RATE: 20.3 / 5.13**

\*see last slide for definition of UCI/LCI



# MOTORCYCLE PMV FATALITIES



Jan 08

**CLASS A FATALITIES/FATALITY RATE FY COMPARISON:**

**9.88**

**FATALITIES/FATALITY RATE: 25 / 12.84**

**10-YEAR AVERAGE (FY99-08) FATALITIES/FATALITY RATE: 12.7 / 6.71**

Max  
23 Jan 09

23

**4 / 6.59  
FY08**

**6 /**

\*see last slide for definition of UCI/LCI

# ***MOTORCYCLE SAFETY***

**Issue: Sport Bike fatalities increasing rapidly**

**FY07: 37 Fatalities, 57% Sport Bikes**

**FY08: 18 Fatalities, 100% Sport Bikes**

**No Sport Bike Training**

**Initiative: Develop and provide Sport Bike Training**

**Nov 07: NSC, CMC(SD) and MSF coordination**

**Dec 08: SECNAV briefed**

**Initial course Beta tests**

**Jan 08: Instructor course Beta tests**

**Feb 08: Curriculum finalized**

**Mar 08: MSF production of course materials**

**Apr 08: Course IOC - RiderCoach Trainer**

**Certifications**

**May 08: RiderCoach Trainers qualify Rider Coaches in MSBC**

**Jun 08: Rider Coaches begin training students in**

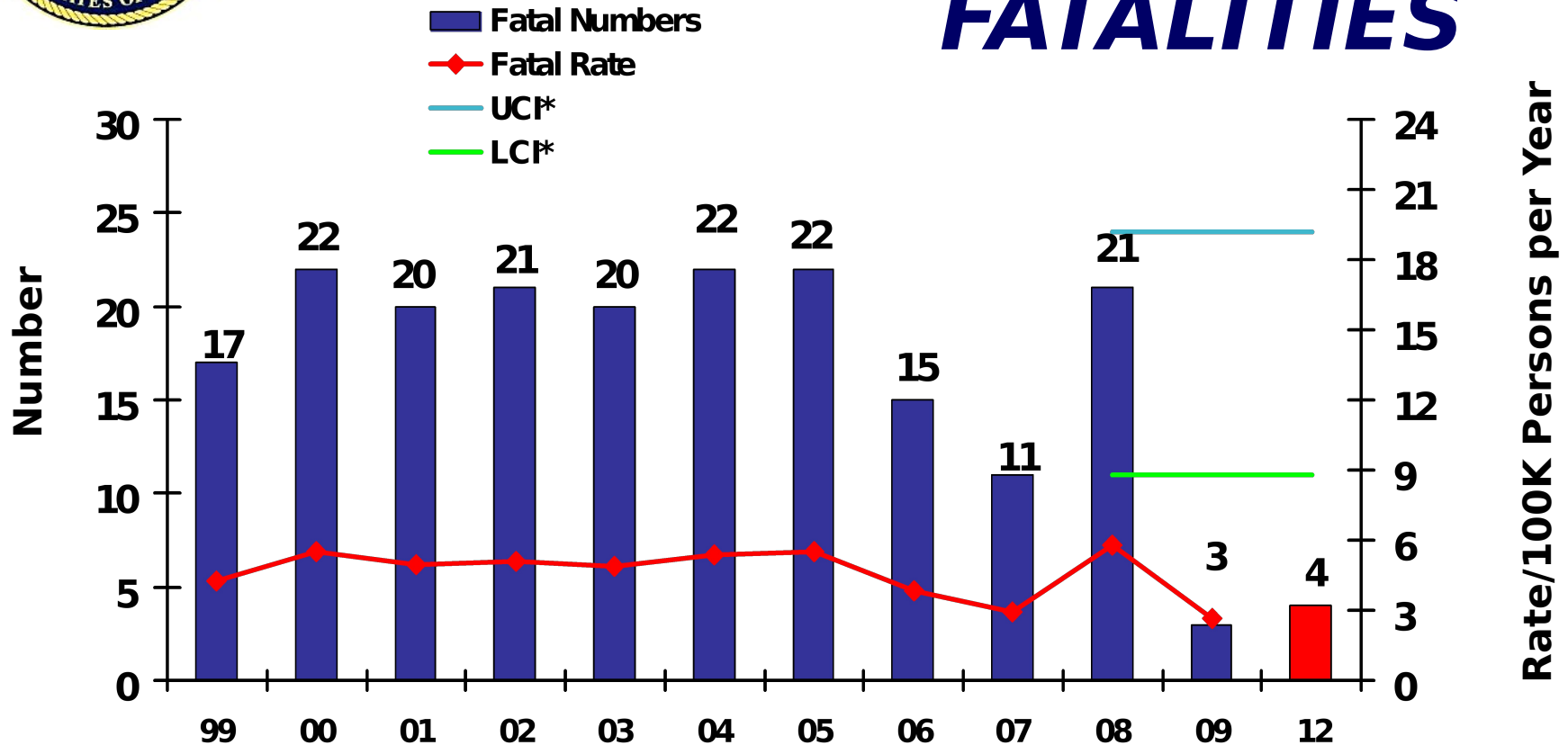
**What hazards exist here?  
Who is looking out for whom?**







# OFF-DUTY/REC FATALITIES



Jan 08

**CLASS A FATALITIES/FATALITY RATE FY COMPARISON:**     3 / 2.64     7 / 6.16

**FY08 FATALITIES/FATALITY RATE:**     21 / 5.77

**10-YEAR AVERAGE (FY99-08) FATALITIES/FATALITY RATE:**     19.1 / 4.82

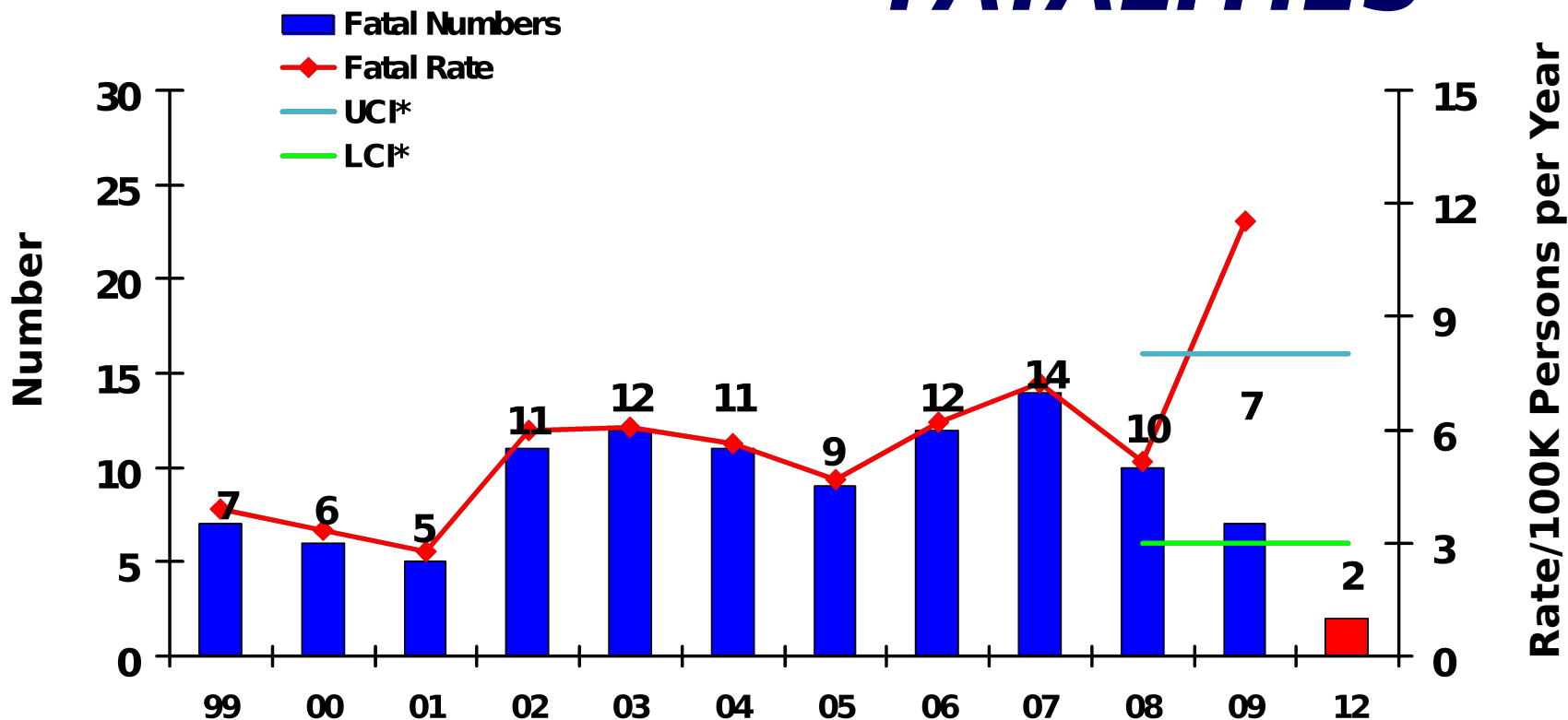
**20 Apr 09**

23 Jan 09     23

\*see last slide for definition of UCI/LCI



# OFF-DUTY/REC FATALITIES



Jan 08

**CLASS A FATALITIES/FATALITY RATE FY COMPARISON: 7 / 11.53 6 / 9.88**  
**CLASS A FATALITIES/FATALITY RATE: 10 / 5.14**

**10-YEAR AVERAGE (FY99-08) FATALITIES/FATALITY RATE: 9.7 / 5.13**

23 Jan 09

23

Max

\*see last slide for definition of UCI/LCI

# ***Best Fleet Practices - Off-Duty Rec***

1. Ensure all supervisors are engaged in Risk Management and Recreation, Athletics and Home Safety programs.
2. RAHS Program Managers – Ensure command personnel attend seasonal hazard awareness training.
3. Employ the risk management process during all on and off-duty activities.
4. Use Individual Off-Duty Risk Assessment Form to assess behavior factors and indicators related to off-duty recreation mishaps.
5. Make use of qualification training and skills test provided by MWR prior to using their facilities and



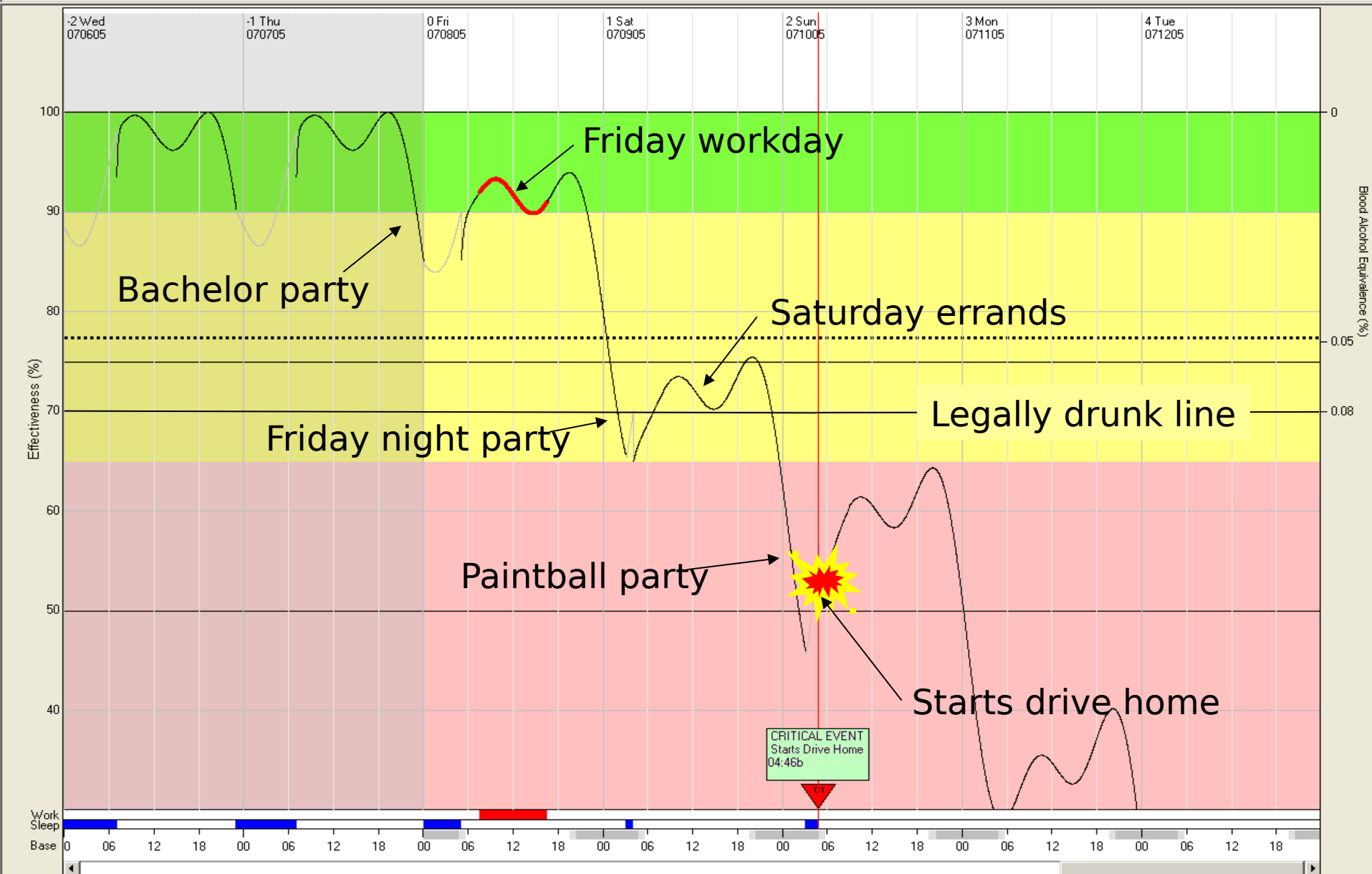
**DRIVECAM**



# ***Fatigue Case Study***

- An E-5 went to a bachelor party until midnight, slept five hours, then went to work. Toiled all day, then went on leave.
- Drove 120 miles to a party and boogalooed until three o'clock in the morning. Slept for an hour on this way back, ran errands all day, met some friends for a midnight game of paintball that lasted once again until that magical hour of 0300.
- Headed home at 0445. Pulled over within 30 minutes to stretch and yawn.
- He then got back behind the wheel, fell asleep on a causeway, veered off the road and ran into two guard rails. His pickup truck went airborne and splashed down into the bay below.
- The sailor came to, released his seat belt, crawled through a broken window and swam to a pylon. Fortunately, a passing motorist had seen the drama and called emergency services.





# ***Effective Use of Risk Management***



# ORM: Risk Management Not Risk Avoidance

## Five Steps

1. Identify Hazards

2. Assess Hazards

3. Make Risk Decisions

4. Implement Controls

5. Supervise

- Easy, common-sense process
- Mind-set
- Way of life – On and Off Duty
- Operating discipline
- Process must be taught
- Must institutionalize ORM – it's

not today

YOU CAN'T "ORM" SOMETHING THAT'S STUPID, TO SOMETHING THAT'S SMART!!!

# Risk Management Levels

Strategic  Tactical

Time Available  
for Planning

*In-  
Depth*

*Deliberate*

Limited / No Time  
for Planning

*Time  
Critical*

**Mission &  
Task  
Success**

- Charts/Flips
- Ship / Aircraft  
(Systems Safety)
- Instructions  
(3710, 5102,  
4790)
- NATOPS
- Equipment  
(PPE)
- Training

- Ops  
Planning
- SOPs
- Briefings
- CO Guidance
- OJT

- Mission Execution  
Checklist
- Change  
Management  
(Environment,  
Mission, Emergency  
Procedures, Crew  
Change)
- Equipment /  
Systems  
Degradation

**Controls from one level become resou**

**A**ssess  
*What is Going  
on*

**B**alance  
*Your Options*

**C**ommunicat  
*Risk &  
Intentions*



# Risk Assessment System

## ***TRACS - Total Risk Assessment and Control***

- Proactive, intuitive, easy-to-use web-based application
- Allows user to assess, manage and report on hazards, risks, and controls.
- Utilizes library construct to store completed risk assessments
  - Private and Public
  - Searchable
- All data transmitted between you and TRACS is made secure by SSL



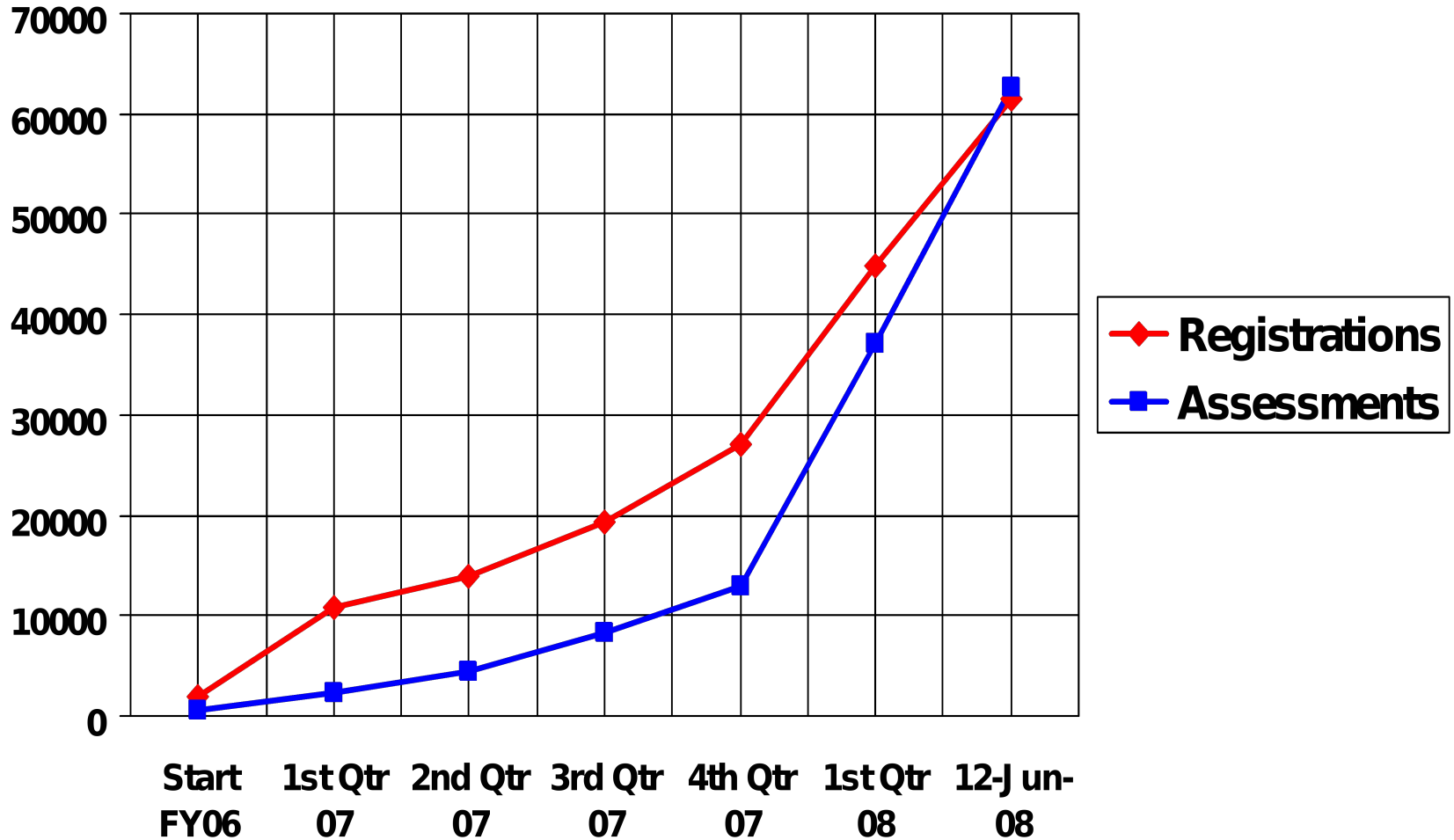


# Travel Risk Planning System

## ***TRiPS - Travel Risk Planning System***

- Delivered to the Naval Safety Center for Fleet use in September 2006; based on ASMIS-2 Army Safety Management Information System
- A click away on [\*\*www.safetycenter.navy.mil\*\*](http://www.safetycenter.navy.mil)
- Provides ORM trip assessment and actual mishap cases relevant to planned trip. Risk values/models based on NTSB data
- Trip map, times, distances and other products improve ***supervisor interaction***; CBT course content designed to help change behavior

# **T r a v e l   R i s k   P l a n n i n g   S y s t e m**



**TRiPS usage increasing.**

# ***Recommendations to Improve Safety***

## **1. Naval Safety Center Website - Tools Are There!**

- Traffic Safety Toolbox
- Web-Enabled Safety System (WESS) – Online mishap reporting / database
- Leave and Liberty Risk Assessments

## **2. Establish a SOLID Welcome Aboard, Sponsorship/ Mentorship Program.**

- First impressions are lasting ones
- On and Off duty activities must be addressed

## **3. Identify “High-Risk” personnel within your command.**

- Engage leadership with subordinate personnel
- Provide awareness training on the popular high-risk activities participated by your crew and mentor high-risk personnel
- Identify motorcyclist, confirm required training is complete; add additional training requirements where appropriate

# ***Recommendations to Improve Safety***

## **4. Be Proactive and Involved.**

- **Schedule a Culture Workshop / Safety Survey**
- **Distribute “Safe Ride” taxi cards**
- **Conduct safety stand-downs when needed and pre-holiday**
- **Require TRiPS and leave chit risk assessments prior to authorizing leave**

## **5. Maintain high-visibility within command.**

- **Enforce Established Standards- defined command safety policy**
- **Treat every mishap the same (PMV/Off-Duty Fatality hurts command as much as an Operational Fatality)**
- **Correct safety deficiencies immediately**
- **Hold yourself and your personnel ACCOUNTABLE**

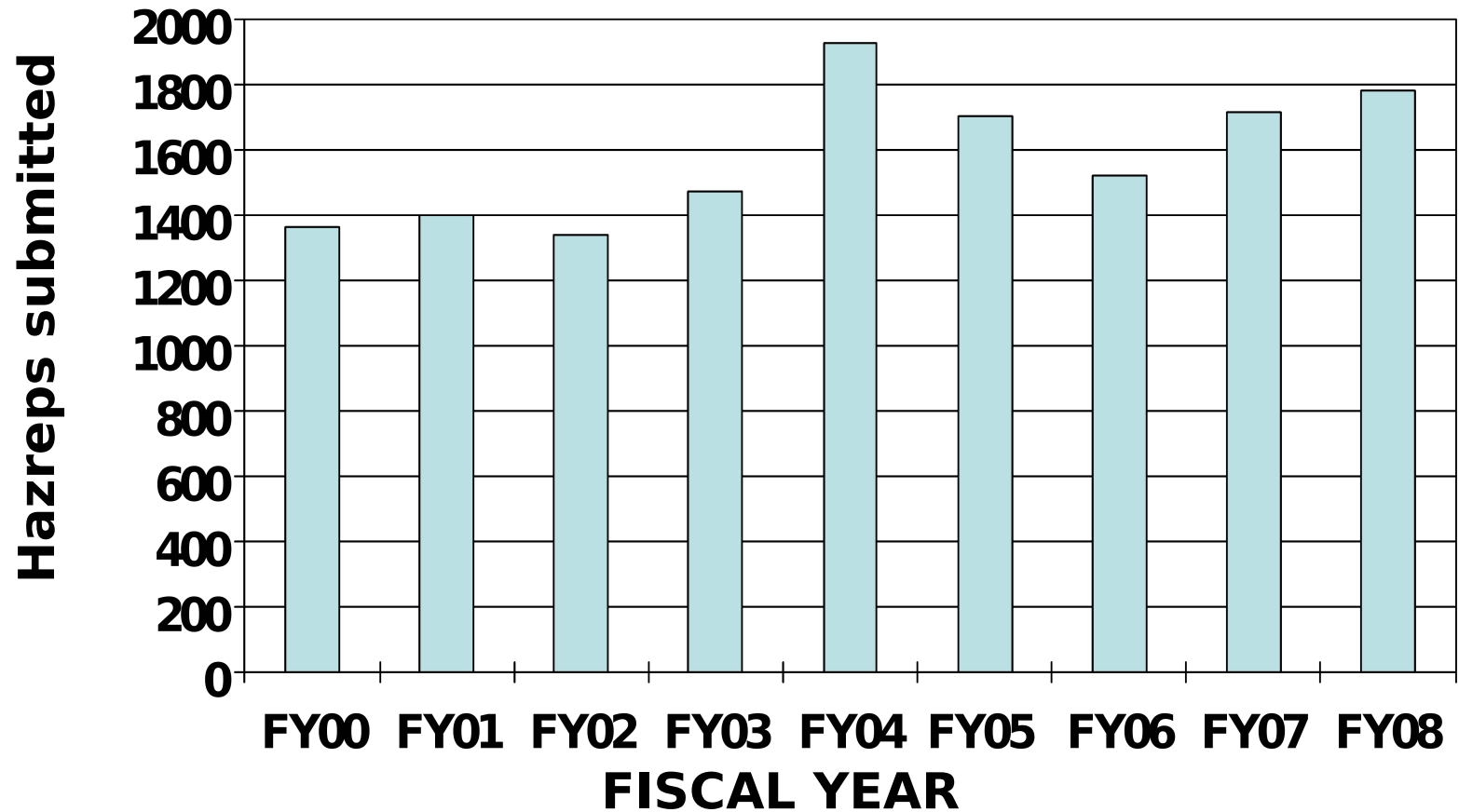
## **6. Expect what you INSPECT.**

- **Verify command policies are understood and followed**
- **Demonstrate daily commitment to safety. If it’s visibly important to you it will be to your crew.**

# ***HAZREP Culture: Where We Want to Be***

- **Establish an open environment for reporting**
  - Fleet Education on DON & NSC Objective
  - Instruction revision ✓ **OPNAVINST 3750.6R Ch 4 rewrite**
  - Training to encourage fleet support during surveys
  - Potential “Safety Hotline” for anonymous reporting
- **Encourage and reward reporting of hazards, near-misses, and lessons learned** ✓ **OPNAVINST 1650.28A recognizes HAZREP submissions for Safety “S”**
  - Improve/revise incentives
- **Identify leading indicators, maximize awareness, and prevent similar mishaps in the future**
  - Create measures of effectiveness to grade environment for hazard reporting
  - Database capabilities

# *Aviation Hazard Reports*





# What We Do for the Fleet

## Naval Safety Center



Providing aviation, afloat, and shore support  
to Navy and Marine Corps commands



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**Publications**

**Website**

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## ON THE ROAD

- Safety surveys
- ORM unit training
- Mishap investigations
- PCO briefings
- Safety Seminar/Safety Symposium
- NAVOSHENVTRACEN Safety & Occupational Health Training

## AWARENESS

- Fleet Analysis
- Magazines printed/distributed (473,000 copies)
- Interactive CD's
- Acquisition process in-roads
- Safety advisories
- Customer information requests (3,600+ database queries per month)
- Safety Center web page

# ***Data Collection / Dissemination***




- An integrated system to web enable the data collection and information dissemination safety business processes for Navy & Marine Corps.
- Allow data transfer with DOD, other Services & other systems with a stake in safety
- Allow safety customers direct access, on-line, to safety data to target mishap prevention.

**DATA FUSION BENEFITS THE FLEET!**

# NSC Website: Your Valuable Resource

***www.safetycenter.  
navy.mil***



# NAVAL SAFETY CENTER

## Work, Play, Live...Safely!

Home | About | OSH | Ashore | Aviation | Media | Acquisition | Resources | Training | Departments | Staff | Site Map

### RESOURCES

- Executive Summary
- DRD Secure Site
- Hearing Conservation Toolbox
- POB Rules
- POB Stages
- Presentations
- Safe Tips
- Safety Toolbox
- Statistics
- Success Stories
- Traffic Safety Toolbox
- TRIPS (Travel Risk Planning System)
- FOIA Request - Navy
- FOIA Request - NSC
- Best Practices
- Best Practices Feedback Form

### SERVICES

- Culture Workshops
- Safety Surveys

### POPULAR

- Friday Forensics
- Photo of the Week

### SEARCH OUR SITE

Show 10 results per page.


You can also use our Site Map to get to the main sections of our site.

### CONTACT US

Naval Safety Center  
375 A Street  
Norfolk, VA 23511  
(757) 444-3620 // (DSN 564)  
Contact the Webmaster or  
Public Affairs Officer

### NEW COURSE!

The Navy and Marine Corps have teamed with the Motorcycle Safety Foundation and developed a course tailored to sport bikes. Tragically, sport bike mishaps are growing at an unacceptable rate. This course will help novice or experienced riders. Sign up for one through your local safety office or for more information, visit the Motorcycle Safety Information page. View the full 5-minute promo.



### WHAT'S NEW

New best practices:  
Ladder Treads-Repairs (1/11/08)  
Video-Safety and Hazard (1/11/08)  
Motorcycle Training POCs  
VF-9 Pilots Save Aircraft (1/11/08)

Weather Update  
Fall Campaign 2008  
WESS News  
New Caption Contest  
Drive Safety Week Week

NETS Summer Road Safety Tips  
NETSA Planner: Click & Print  
Signs of the Times #4 New presentation  
Aviation Mishap Workshop  
CMC Toolbox

### PMV Counter

for the latest statistics, please refresh your browser

Number of days since the last fatality	
4	2 Wheel - USN
30	4 Wheel - USN
96	2 Wheel - USMC
1	4 Wheel - USMC

USN:

31 Aug 08 (CHSLION/HILL) Chula Vista, CA. O-2 died on 05 Sep 08 from injuries sustained in a motorcycle accident.

27 Aug 08 (CNOINAVY RECRUITING DISTRICT NEW ENGLAND) Plymouth, MA. E-5 died in a motorcycle accident when he impacted a guardrail. SNM was wearing proper PPE. Alcohol was not a factor.

USMC:

07 Sep 08 (1ST MARDIV3RD AA BN) Amboy, CA. E-4 died on 07 Sep 08 from injuries sustained in a single vehicle accident.

27 Aug 08 (WEAPONS TRAINING BN/MCB CAMP LEJUNE) Onslow County, NC. E-4 died in a single vehicle accident when he drove across oncoming traffic lane and into a ditch. The car flipped and landed on its roof.

PMV Stats | PMV Narratives | Preliminary Loss Report (PLR)

### LATEST PODCASTS

From the Archives of the Friday Forensics: "Calibrating Your Risk-o-Matic"  
From the Archives of the Friday Forensics: "The Adventure of the 8,000 Pound Bear Trap" 4

### LATEST VODCASTS

Friday Forensics News Desk - Episode 4  
Friday Forensics News Desk - Episode 3

### NEW ARTICLES/VIDEOS

New Military Sport Bike Training Unveiled in Norfolk  
Admiral Johnson discusses TCFM

### NEWEST MAGAZINE EDITIONS

July-August  
**Approach**



Spring  
**Mech**




Summer  
**Approach**




2008  
**RIDE**




### POPULAR PLACES












Last Modified: Tuesday, September 09, 2008

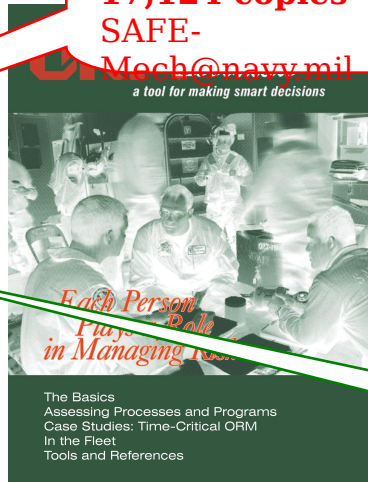
Official Navy Website This is an official U.S. Navy Web site. 1-800-USA-NAVY  
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# Our Magazines Reach Every Community

## "Tell Your Story"

**MECH (1961)**  
**17,124 copies**  
**SAFE-**

**Mech@navy.mil**



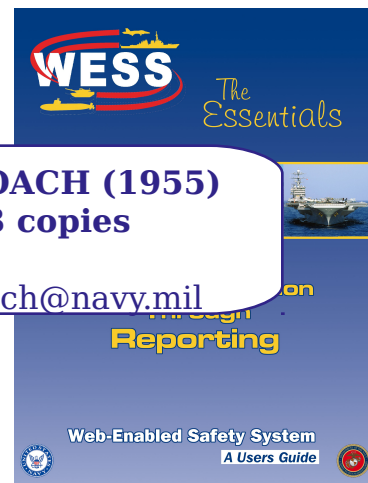
- Focus on time-critical ORM
- Includes basic and advanced concepts
- Real-life scenarios and analysis
- Success stories, lessons learned from fleet units

Tools, references and links

• On the

**SEA&SHORE (2004)**  
**30,442 copies**  
**SAFE-**

**SeaShore@navy.mil**



**APPROACH (1955)**  
**16,183 copies**  
**SAFE-**  
**Approach@navy.mil**



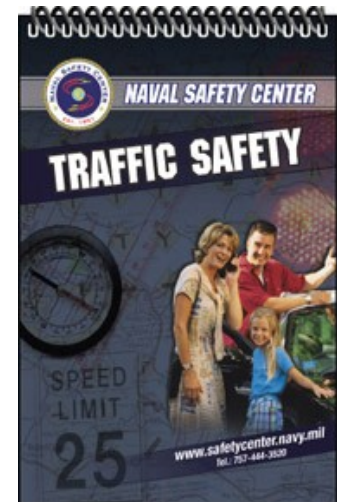
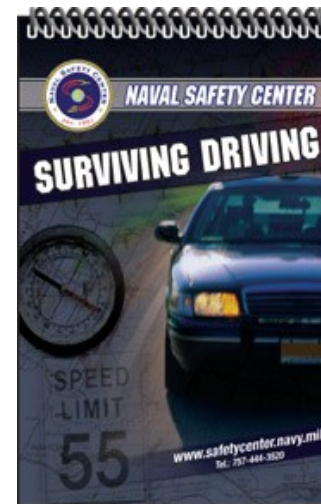
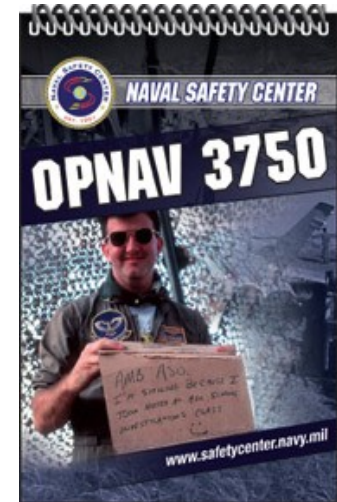
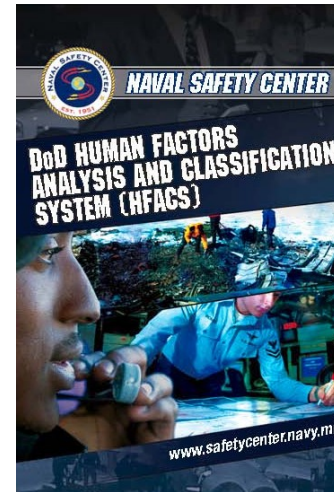
- Detailed user's guide
- Includes FAQs, guidance for common problems
- Flow chart of complete reporting and QA process
- Covers both 3750 and 5102 topics, incl. aviation, motor vehicles, explosives, diving, OSH and parachute

• Distribution of 3K copies to 1,560 addresses in July 2007



# QuickSeries Guides

- Resource-intensive flip books
- Data, guidance, tools, reference material
- Well-received by fleet
- Sent on request
- Motorcycle rider guide in work





# **A MISHAP-FREE NAVY+MARINE CORPS *Team***

**Is It Possible??**





# Navy Mishap Free Squadrons (FY-07)

*\* No reported Class A/B/C , FM/FRM/AGM*

HC-2	HC-85	HS-4	HS-10
HS11	HS15	HSL3	HSL40
HSL41	HSL-42	HSL-43	HSL-44
HSL-45	HSL-47	HSL-48	HSL-51
HSL-60	VAQ-129	VAQ-130	VAQ-132
VAQ-133	VAQ-134	VAQ-136	VAQ-137
VAQ-138	VAQ-141	VAW-112	VAW-115
VAW-117	VAW-121	VAW-123	VAW-124
VAW-125	VAW-126	VFA-2	VFA-14
VFA-22	VFA-32	VFA-34	VFA-37
VFA-87	VFA-94	VFA-102	VFA-113
VFA-115	VFA-125	VFA-136	VFA-137
VFA-147	VFA-151	VFA-154	VFA-211
VFA-213	VP-1	VP-4	VP-5
VP-9	VP-26	VP-30	VP-40
VP-46	VP-62	VP-69	VPU-2
VQ-3	VQ-7	VS-22	VT-3
VT-4	VT-6	VT-7	VT-10
VT-22	VT-27	VT-31	VT-35
HT-8	HT-18	HT-28	VX-1



# The Challenge to You

- **Engaged Leadership**
- **Support and actively promote integration of ORM**
  - On and Off Duty
  - Use Deliberate Assessment Process
  - Integrate TCRM - "What's different today?"
  - Support ORM Assessment at all levels
- **Use the resources and tools available**
- **Establish an environment where hazards can be identified by anyone at any time**
- **Provide feedback and share**
- **Work together to lookout for our shipmates (on and off duty) and preserve Navy resources in order to ensure mission readiness and help eliminate these...**

QUESTIONS?  
COMMENTS!

QUESTIONS?  
COMMENTS!

